Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims of this application:

Listing of Claims:

1-19 (Canceled).

20. (Previously presented) A method according to Claim 21 wherein the electric stimulus comprises one of a defibrillation stimulus and a pacing stimulus.

21. (Previously presented) A method for reducing an occurrence of fibrillation of a heart, comprising:

detecting a premature contraction of the heart for a plurality of heart beats characterized by nonsustained tachycardia; and

applying an electric stimulus to a region of the heart that is likely to contain a fastest activating region, wherein a location of the fastest activating region is determined by:

inducing fibrillation of the heart; and

determining, using internally implanted electrodes applied to the heart, at least one of a monophasic activation potential (MAP) reading associated with the fibrillating heart, a refractory period associated with the heart using premature stimulation, and a power spectrum analysis to provide a spectrum with a peak power at a highest frequency.

22. (Previously presented) A method according to Claim 21 wherein the fastest activating region comprises a reentrant region having a refractory period that is less than areas adjacent to the reentrant region.

23. (Previously presented) A method according to Claim 21 wherein a first wavefront comprising a mother rotor propagates along a closed pathway on the

fibrillating heart, wherein the first wavefront generates at least a second wavefront that propagates on the fibrillating heart outside the fastest activating region.

24. (Previously presented) A method according to Claim 22 wherein the reentrant region is characterized by a closed pathway of the tissue of the heart.

25. (Original) A method according to Claim 24 wherein a wavefront propagates along the closed pathway from a starting point on the closed pathway to an ending point on the closed pathway.

26. (Original) A method according to Claim 25 wherein the starting point and the ending point are adjacent to one another on the closed pathway.

27. (Currently amended) A method for reducing an occurrence of fibrillation of a heart, comprising:

during heart activity characterized by at least one of normal heartbeat activity, premature heartbeat activity, or nonsustained tachycardia activity, applying an electrical stimulus to a region of the heart determined to contain a fastest activating region, wherein a location of the fastest activating region is determined by

using internally implanted electrodes applied to the heart to determine ~~determining~~ a refractory period associated with the heart using premature stimulation, to determine ~~determining~~ an activation recovery interval measurement associated with the heart, or to determine ~~determining~~ a Monophasic activation potential (MAP) reading of the heart.

28. (Original) A method according to Claim 27 wherein the fastest activating region comprises a reentrant region having a refractory period that is less than areas adjacent to the reentrant region.

29. (Previously presented) A method according to Claim 27 wherein a first wavefront comprising a mother rotor propagates along a closed pathway on the heart,

wherein the first wavefront generates at least a second wavefront that propagates on the heart outside the fastest activating region.

30. (Previously presented) A method according to Claim 28 wherein the reentrant region is characterized by a closed pathway of the tissue of the heart.

31. (Previously presented) A method according to Claim 30 wherein a wavefront propagates along the closed pathway from a starting point on the closed pathway to an ending point on the closed pathway.

32. (Previously presented) A method according to Claim 31 wherein the starting point and the ending point are adjacent to one another on the closed pathway.

33-35 (Canceled).

36. (Currently amended) A method for reducing an occurrence of fibrillation of a heart, comprising:

during heart activity characterized by at least one of normal heartbeat activity, premature heartbeat activity, or nonsustained tachycardia activity, applying an electrical stimulus to a region of the heart containing a fastest activating region, wherein a location of the fastest activating region is determined by:

inducing fibrillation of the heart; and

determining, using internally implanted electrodes applied to the heart, at least one of a monophasic activation potential (MAP) reading associated with the fibrillating heart, a refractory period associated with the heart using premature stimulation, and a power spectrum analysis to provide a spectrum with a peak power at a highest frequency.

37-54 (Canceled).

55. (Currently amended) A system for reducing an occurrence of fibrillation of a heart, comprising:

means for detecting a premature contraction of the heart for a plurality of heart beats characterized by nonsustained tachycardia using internally implanted electrodes applied to the heart; and

means for applying an electrical stimulus to a region of the heart not in fibrillation determined to contain a fastest activating region.

56. (Currently amended) A system for reducing an occurrence of fibrillation of a heart, comprising:

means for detecting a premature contraction of the heart for a plurality of heart beats characterized by nonsustained tachycardia;

means for applying an electrical stimulus to a region of the heart not in fibrillation likely to contain a fastest activating region;

means for inducing fibrillation of the heart; and

means for determining, using internally implanted electrodes applied to the heart, at least one of a monophasic activation potential (MAP) reading associated with the fibrillating heart, a refractory period associated with the heart using premature stimulation, and a power spectrum analysis to provide a spectrum with a peak power at a highest frequency.

57. (Original) A system according to Claim 55 wherein the fastest activating region comprises a reentrant region having a refractory period that is less than areas adjacent to the reentrant region.

58. (Previously presented) A system according to Claim 55 wherein a first wavefront comprising a mother rotor propagates along a closed pathway on the heart, wherein the first wavefront generates at least a second wavefront that propagates on the heart outside the fastest activating region.

59. (Previously presented) A system according to Claim 57 wherein the reentrant region is characterized by a closed pathway of the tissue of the heart.

60. (Original) A system according to Claim 59 wherein a wavefront propagates along the closed pathway from a starting point on the closed pathway to an ending point on the closed pathway.

61. (Original) A system according to Claim 60 wherein the starting point and the ending point are adjacent to one another on the closed pathway.

62. (Currently amended) A system for reducing an occurrence of fibrillation of a heart, comprising:

means for applying, during heart activity characterized by at least one of normal heartbeat activity, premature heartbeat activity, or nonsustained tachycardia activity, an electrical stimulus to a region of a heart determined to contain a fastest activating region of the heart, the system further comprising at least one of:

means for determining, using internally implanted electrodes applied to the heart, a refractory period associated with the heart using premature stimulation;

means for determining, using internally implanted electrodes applied to the heart, an activation recovery interval measurement associated with the heart; and

means for determining, using internally implanted electrodes applied to the heart, a Monophasic activation potential (MAP) reading of the heart.

63. (Original) A system according to Claim 62 wherein the fastest activating region comprises a reentrant region having a refractory period that is less than areas adjacent to the reentrant region.

64. (Previously presented) A system according to Claim 63 wherein a first wavefront comprising a mother rotor propagates along a closed pathway on the fibrillating heart, wherein the first wavefront generates at least a second wavefront that propagates on the heart outside the fastest activating region.

65. (Previously presented) A system according to Claim 63 wherein the reentrant region is characterized by a closed pathway of the tissue of the heart.

66. (Original) A system according to Claim 65 wherein a wavefront propagates along the closed pathway from a starting point on the closed pathway to an ending point on the closed pathway.

67. (Original) A system according to Claim 66 wherein the starting point and the ending point are adjacent to one another on the closed pathway.

68-70 (Canceled).

71. (Original) A system according to Claim 62 further comprising:

means for inducing fibrillation of the heart; and

means for determining a refractory period associated with the heart using premature stimulation.

72. (Currently amended) A system for reducing an occurrence of fibrillation of a heart, comprising:

means for applying, during heart activity characterized by at least one of normal heartbeat activity, premature heartbeat activity, or nonsustained tachycardia activity, an electrical stimulus to a region of a heart that is likely to contain a fastest activating region of the heart;

means for inducing fibrillation of the heart; and

means for determining, using internally implanted electrodes applied to the heart, at least one of a monophasic activation potential (MAP) reading associated with the fibrillating heart, a refractory period associated with the heart using premature stimulation, and a power spectrum analysis to provide a spectrum with a peak power at a highest frequency.

73-90 (Canceled).

91. (Currently amended) A computer program product for reducing an occurrence of fibrillation of a heart, comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code configured to detect a premature contraction of the heart for a plurality of heart beats characterized by nonsustained tachycardia using internally implanted electrodes applied to the heart; and

computer readable program code configured to apply a defibrillation stimulus to a region of the heart not in fibrillation determined to contain a fastest activating region.

92. (Currently amended) A computer program product according to Claim 91 further comprising computer readable program code configured to determine the region of the heart likely to contain the fastest activating region including:

computer readable program code configured to induce fibrillation of the heart; and

computer readable program code configured to determine, using internally implanted electrodes applied to the heart, at least one of a monophasic activation potential (MAP) reading associated with the fibrillating heart, a refractory period associated with the heart using premature stimulation, and a power spectrum analysis to provide a spectrum with a peak power at a highest frequency.

93. (Original) A computer program product according to Claim 91 wherein the fastest activating region comprises a reentrant region having a refractory period that is less than areas adjacent to the reentrant region.

94. (Previously presented) A computer program product according to Claim 91 wherein a first wavefront comprising a mother rotor propagates along a closed pathway on the fibrillating heart, wherein the first wavefront generates at least

a second wavefront that propagates on the fibrillating heart outside the fastest activating region.

95. (Previously presented) A computer program product according to Claim 93 wherein the reentrant region is characterized by a closed pathway of the tissue of the heart.

96. (Original) A computer program product according to Claim 95 wherein a wavefront propagates along the closed pathway from a starting point on the closed pathway to an ending point on the closed pathway.

97. (Original) A computer program product according to Claim 96 wherein the starting point and the ending point are adjacent to one another on the closed pathway.

98. (Currently amended) A computer program product for reducing an occurrence of fibrillation of a heart, comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code configured to apply, during heart activity detected by internally implanted electrodes applied to the heart characterized by at least one of normal heartbeat activity, premature heartbeat activity, or nonsustained tachycardia activity, an electrical stimulus to a region of the heart not in fibrillation determined to contain a fastest activating region.

99. (Original) A computer program product according to Claim 98 wherein the fastest activating region comprises a reentrant region having a refractory period that is less than areas adjacent to the reentrant region.

100. (Previously presented) A computer program product according to Claim 98 wherein a first wavefront comprising a mother rotor propagates along a

closed pathway on the fibrillating heart, wherein the first wavefront generates at least a second wavefront that propagates on the fibrillating heart outside the fastest activating region.

101. (Previously presented) A computer program product according to Claim 99 wherein the reentrant region is characterized by a closed pathway of the tissue of the heart.

102. (Original) A computer program product according to Claim 101 wherein a wavefront propagates along the closed pathway from a starting point on the closed pathway to an ending point on the closed pathway.

103. (Original) A computer program product according to Claim 102 wherein the starting point and the ending point are adjacent to one another on the closed pathway.

104. (Original) A computer program product according to Claim 98 further comprising computer readable program code configured to determine the region of the heart likely to contain the fastest activating region including:

computer readable program code configured to determine a refractory period associated with the fibrillating heart using premature stimulation.

105. (Original) A computer program product according to Claim 98 further comprising computer readable program code configured to determine the region of the heart likely to contain the fastest activating region including:

computer readable program code configured to determine an activation recovery interval measurement associated with the fibrillating heart.

106. (Original) A computer program product according to Claim 98 further comprising computer readable program code configured to determine the region of the heart likely to contain the fastest activating region including:

computer readable program code configured to determining a Monophasic activation potential (MAP) reading associated with the fibrillating heart.

107. (Previously presented) A computer program product for reducing an occurrence of fibrillation of a heart, comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code configured to apply, during heart activity characterized by at least one of normal heartbeat activity, premature heartbeat activity, or nonsustained tachycardia activity, an electrical stimulus to a region of the heart not in fibrillation that is likely to contain a fastest activating region;

computer readable program code configured to induce fibrillation of the heart; and

computer readable program code configured to determine, using internally implanted electrodes applied to the heart, at least one of a monophasic activation potential (MAP) reading associated with the fibrillating heart, a refractory period associated with the heart using premature stimulation, and a power spectrum analysis to provide a spectrum with a peak power at a highest frequency.